Science Guards Baby's Dinner.

An Object Lesson to Young Mothers Regarding the Proper Care of the Nursing Bottle.

majority of deaths of infants is the with just a single rubber nipple. consensus of opinion among the best proper amount of fear which it inspires in the man of science.

'Always remember that there is a the bottle," was the advice given a young mother the other day by Mrs. M. C. Dunphy, the superintendent of Randall's Island, New York City.

The young mother, the wife of a well-to-do Harlem tradesman, had gone over to the island to find out how milk and milk bottles and nursing nipples were really sterilized. She had read in the papers and the magazines hundreds of directions, and none of them seemed to agree, or else the directions were not worded plainly. Her three-months'-old baby was not thriving, and she very wisely determined to have somebody show her exactly how to sterilize milk and bottle and nursing nipples.

Like hundreds of other would-be scientific mothers, this one had been "sterilizing" milk by simply immersing the bottles in water and allowing them to remain until the water reached the boiling point, and as a matter of fact the milk was thereby rendered even more dangerous than before it had been sterilized.

The mother was then shown by sim plified process how she could prepare her baby's milk at home with the joyful certainty that after sterilizing it was absolutely pure and germ proof.

most complete facilities for the suc-



any place in the world. The first pro- rinsed in cold water, then put in a ketcass consists of straining the milk, the with a piece of borax and allowed which is done by a patent separator, to boil for twenty minutes. for Randall's Island is raising just | While the bottles were boiling Miss

Important feature, and can be done mother how to sterilize the bottles and Island. Mrs. Dunphy showed the water. young mother how. Taking two yards | "Never lay a bottle on its side, but of cheese cloth which had already been turn it up," said Miss McCarthy. boiled twenty minutes, she folded this "Many mothers imagine if they have luto a little bundle about eight inches | boiled nipples and laid them on the square, laid it in an earthenware pie | window sill to dry in the sun that all plate and placed the plate in a hot the germs are destroyed. That is all oven, where it remained until the top wrong. The warm sunshine only praining the bottles on sterilized fold began to get brown. A coarse warms the little stray germs into life." towel was also put in the oven at the | Two folds of the sterilized cheese

dust there is even in the cleanest milk. in the sterilized towel and put away

That the nursing bottle, either di- one of the old-fashioned death-dealing and a physician should be consulted rectiv or indirectly, is the cause of the horrors with a long rubber tube, but

· In the morning to last all day, and in

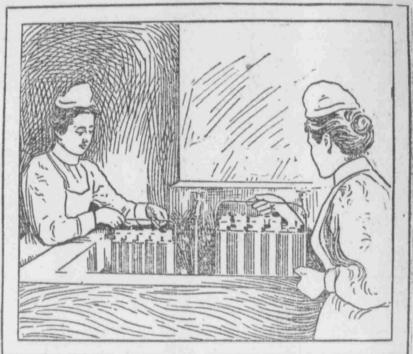
Mrs. Dunphy filled ten bottles, the medical authorities. Much as has requisite number for one baby. The been written and prayed and preached bottles were inserted in cylinders, weight. The falling off in weight of against it, there are few mothers who bound together for convenience by a even an ounce or two means someregard the nursing bottle with the tin band. These cylinders can be thing, and what this something is none made by any tinsmith for twenty-five but the physician should determine. or thirty cents per set of ten. The risk-a great risk-however careful ders were set in a porcelain kettle full and bottles and nipples made germ you are, in bringing up your baby on of lukewarm water, just large enough proof, is a question often asked by to hold them without allowing them | mothers through the columns of news-

ing. More than that should never be sterilized, because, while the milk may keep sweet a much longer time it loses much of its nutritive power if allowed to grow the least bit stale. If baby appears to be not thriving. and the mother can determine this by

the evening to last until next morn-

weighing it carefully every other day, then its milk is not agreeing with it. immediately. The healthy baby will increase in weight between certain ages, while at others it will remain almost uniform, but it will never lose

In just what proportions to dilute bottles, corked up tightly, the cylin- the milk after it has oeen sterilized



THE COOLING PROCESS.

it was pronounced sterilized.

Lifting the cylinders out of the ketbefore being put in the icebox; if put | milk in the icebox immediately after taking from the boiling water the milk gets cold too quickly, and all the beneficial results of the sterilizing are neutral-

The milk must then be kept on ice until time for feeding the baby, when the bottle is again immersed in hot water until the milk is heated to 98 degrees, or the warmth of mother's

After feeding, just as quickly as possible, the bottle and nipple must be

Margaret McCarthy, the assistant st The straining of the milk is a most pervising nurse, showed the young quite as well at home as at Randall's nipples after they came out of the

cloth were then laid on a piece of Nine little squares were cut out of clean, unpainted board-a kneading the cheese cloth with bright clear seis- board is a good thing-and the bottles, sors. Three of these squares were tied necks downward, were dropped into over a common milk strainer, the milk the interstices of a wire rack and alwas poured through into another simi- lowed to drain on to the cheesecloth. lar strainer, similarly fixed with steril- The nipples were dried with a piece of ized cheese cloth, and still through an- the same sterilized material and then wrapped in cheesecloth. The remain-It is appalling how much dirt and der of the checsecloth was folded up

At Randall's Island they have the to wabble. The kettle was placed on papers. No general rule can be formua cook stove and the water allowed to lated to answer this question. That is bubble and boil around the bottles for something which the physician alone not less than twenty minutes. Then can determine. The formula that will agree perfectly with one baby often proves the death of another. Each tle, they were set in a sink and the baby requires individual attention, cold water faucet turned on. It is and the wise mother will avoid anyvery important that the milk should thing except professional advice rebe thus cooled and in running water garding the preparation of her baby's

> If the mother at home will guard the nursing bottle for one mite of a baby with as much rigor as Mrs. Dunphy



CHEESE CLOTH,

to a minimum within the next two

The Randall's Island babies, poor little waifs picked up in doorways, railway stations, deserted warehouses and occasionally fished out of damp, leaky old scows or garbage cans, wax strong and flourish on a bottle diet, while the child of well-to-do parents. living in a comfortable home, often dies of neglect-that is, neglect of the

milk bottle. The Randall's Island babies are invariably more dead than alive when they reach the hospital. Every so often when the shabby little bundle is unrolled on arrival it is discovered that the little feet are stiff and cold, and many a feeble life ebbs out ere the boat that carries the frail burden

s moored to the landing. And still a larger percentage of these babies live and grow into strong, hearty children than any other class of bottle-fed infants, not because they are pampered and cared for like hothouse flowers, for where there are 142 babies there is no time for pampering, but because the milk bottle is feared, as it must be by all conscientious mothers.-New York Herald.

A Little Mistake in Medals.

The chief officer of a Yorkshire yeomanry regiment, while congratulating one of the troops on its appearance, made a stirring allusion to the medals worn by some army veterans in the ranks. One of the men, a native of Wharfdale, afterward went home in a very thoughtful frame of mind, and next morning he came on parade with several medals on his breast. Said the officer,"I didn't know you had been in the regulars." "No, I ain't," said the man. "Well, how about the medals, then, my good fellow? They can't be yours." The man promptly answered: "Can't they! Aye, but they be. My old coo won 'em all at Otley Show."-Upper Wharfdale.

Fox-Hunting Parsons,

There are still in England two repesentatives of the old-time fox-hunting parson. These are the Rev E. The milk should be prepared twice a ing parson. These are the Rev. E. When sufficiently cold it was poured day-mornings and evenings; that is, holds, who are respectively masters anto an eight owner nursing bottle-not enough should be prepared at one time of the Cattistock and Coniston packet

A UNIFORM FOR WOODMEN. Dress For Cold Weather Adopted by Montana Foresters.

The forest superintendents and woodsmen in Montana have recently adopted a uniform, as shown in the accompanying photograph, which will be worn by them while ranging in the public forest reservations in that State during the winter. These uniforms have been submitted to the Secretary of the Interior and the Commissioner of the General Land Office, and efforts



A MONTANA WOODMAN.

may be made to have all Government forest employes furnished with similar clothing. These men are exposed to much bad weather. A suitable uniform is certainly essential to their performing their duties satisfactorily.

Now that the forest reservations have become a source of revenue to the-Government, the duties of the foresters are more important, and their instructions are more rigid. In 1898 there was cut and sold about \$300,000 worth of timber from Western forest reserves. With proper care of the forests and an efficient corps of men to guard against forest fires, it is expected that this revenue will steadily

Timber is in every country an imountry it has been especially plentiful, but up to within four or five years the American forests were allowed to run down and left in a bad condition. Since Commissioner Binger Herman became the official head controlling the forests many schemes have been | that State they have some good roads instituted to repair the damaged forests, and their present improved con- about ten thousand miles of very good dition is largely due to his strenuous gravel roads. He found from the reefforts. One of his most recent ports of the farmers themselves that schemes is the telephone system, the difference between good and bad which was established in California roads was seventy-eight cents an acre las spring. This system was only an annually on their farms. ex riment, but in all probability it will eventually be extended to all for- the United States, would make \$5,000,est reserves in the United States .-New York Tribune.

RUBBER BISCUITS.

The Shape in Which the Para Product is Shipped.

To form the biscuits, the natives take long stakes of wood, sometimes pointed at the end, and quite frequently shaped like a paddle, dip them into the sap buckets or basins, holding them in the smoke after each dipping until the successive films of rubber solidify around them. A biscuit of Para rubber, therefore, represents the slow and laborious accumulation of hundreds of dippings, so that quite a stretch of the imagination would be necessary to arrive at the number of dippings required to form the huge Para biscuit illustrated herewith, which weighs 1120 pounds, and measures four feet five inches in height,



RUBBER BISCUIT.

three feet five inches in diameter and nine feet four inches in circumference. Such immense masses of crude rubber are said to actually represent a loss to the grower, being used principally by importers for exhibition purposes. Sometimes the natives use a stone as a nucleus, and, to prevent this method of securing an illegitimate profit, the biscuits are split in halves before shipment so as to reveal the stake hole running through the middle,

Silent Railroad Signals."

Railway whistles inflict tortures on so many people that Austria has introduced a system of silent signaling. Beigium is trying compressed air whistles instead of steam, and Germany experiments with horns.

Good Roads Potes

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Statistics That Convince.

THE splendid road conditions existing on the continent of Europe can be duplicated here. The question is one for the people themselves to solve, and it is actually being solved in the United States to-day by the voluntary action of communities in various sections of the country.

For example, writes General Roy Stone, in the New York Journal, I heard that there were some especially good stone roads being constructed in the State of New York, so I went there myself, and to make sure that I should make a thorough test, I went in the midst of a January thaw. I got a pair of horses and a light buggy to test other roads around the country and I found that with a great deal of difficulty I could drive over them.

But in the section where the farmers had been building the stone roads I found that two tons of hay were being hauled with two ordinary horses on a common narrow-tired wagon. I said to the farmers: "How did you get started in this business of building

They said: "We started it ourselves. We thought we could do something, as our fields are full of stone, with stone fences along the road, so we scraped together enough money to buy a rock crusher, hired an engine to run it, and arranged to bring in the stones and haul back the crushed stone."

They have actually gone so far as to petition the Legislature for the privilege of increasing their taxation beyond what the law allowed, and the result is that all the farmers in that township are anxiously waiting for the roads to be extended into their particular neighborhoods.

I said to them: "Doesn't this pile up your taxes?" "Why," one farmer said, "in this one week, by the advantage of having these stone roads and getting to market with my hay, when it sells at a good price, my teams have earned \$5 every day, while my neighbors' teams on the other roads are eating their heads off. We could not afford not to have these roads; we do not care anything about the taxa-

A bright statistician, taking the railroad returns of freight and the amount ortant natural product, and in this of it that is hauled over the public roads, makes the needless cost of moving the farm products of the United States to be \$600,000,000 a year.

Professor Latta, of Perdue University, investigated it from the point of view of the farmers of Indiana. In -not the highest class of roads, but

This, taken all over the farm area of

I took a broader view of it, and sent out letters to the 10,000 farmers in the United States who had been selected as the best representative men to gather statistics for the Department of Agriculture.

Taking the proper cost to be the present cost to the farmers in the good roads district of New Jersey, where there are actually as good roads as are found in any part of Europe. I found that the cost of hauling over the ordinary roads of the country is just about three times as much as the cost of hauling over good stone roads. Where a load is three tons on good roads it is one ton on the average farm roads.

A Business Proposition

The steady progress of the good roads movement among farmers shows the study that is being given this very important economic question. Speaking of the necessity for highway improvement A. B. Choate, Vice-President of the League of American Wheelmen, says:

"Every person who is at all familiar with the business of a modern railway company knows that but a fraction of its money and employes are engaged in actual hauling of freight and passengers from one city to another. We know that millions of dollars and thousands of men are employed by the railway companies to secure suitable terminals and to handle freight and passengers when not in actual transit. And yet no man can be found who is so foolish as to think that an immense railway business can be profitably conducted unless the best modern railroad bed and track are provided for that part of the business which consists of hauling goods and passengers.

"So it is with the vast agricultural business of the United States. Although most of the work is done on the farm, a large part c; it consists in hauling freight, and every well-informed person knows that a good wagon road for railway business is one of the most important facilities for doing this business. It is too late in the progress of events to argue this proposition."

' A Mystery to Be Explained.

Some day a great philosopher w get born who will explain why a won an always addresses her envelope by fore she writes her letter.-New You

As to Hat Crowns. The crown of a man's hat is ma to fit his head, that of a woman's fit her hair.

The Irish language is taught in cily six schools in Ireland.

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JUDICIOUS ADVERTISING - PAYS. -

THE NATIONAL GAME.

Mertes, of Chicago, leads the League in stolen bases. Keister is keeping up his strong game for St. Louis

Boston has won but one game in

Brooklyn this season. Catcher "Jiggs" Donahue has signed with Pittsburg for next year.

The New York Club has suspended Pitcher Seymour for balance of sea-Hamilton, of Boston, was the third

player to reach the century mark in Pittsburg is the first club to win as many games as fifteen in a series from

Nick Young says there likely will be a return to the double umpire system next year.

Harley says the pitching in the American League is just as hard to hit as in the National League.

The young Connecticut League catcher receiving a trial by Boston is the famous Roger Connor's brother.

It is almost a certainty that the ball players are going to suffer a further ut in salaries when they sign for 1901.

Pitcher McGinnity, of Brooklyn, says he is sincere in his determinaion to quit base ball at the end of the

Childs, Ryan and Cunningham are san to be positively marked for re-leass from the Chicago team by Manage Loftus.

The Brooklyn Club has bought back Anderson and Fultz from the Milwaukee Club, and has also purchased Shortstop Gatins from Hartford, Donovan and Steelman have also been recalled from the latter city.

An oddity of the baseball season now. nearing an end is the result of series between the fast Pittsburg players and the Cincinnatis, who are floundering near the tail end. The Reds captured the series by twelve victories to eight.



PUTTING THE BOTTLES INTO THE BOILER.

The milk was then put into a large | until time to go through the same proee to get very cold. but not to freeze.

virtight bottle, and the bottle set into cess in the evening.

and her assistants look to the bottles for their 142 babies, the death rate among city children might be reduced